Serial No. 10/596,275 Docket No. NEC DP-1058 Amendment D with RCE

## **AMENDMENTS TO THE CLAIMS**

Please amend claims 2, 5, 19 and 21-24 as set for below. This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (cancelled)

Claim 2 (currently amended): A fuel cartridge that houses liquid fuel, comprising:

a gas-liquid separation film that separates the liquid fuel and fuel gas, which is the vaporized liquid fuel, from each other;

a gas housing chamber that houses the fuel gas separated by the gas-liquid separation film; [[and]]

a shutter that adjusts a degree of exposure of the gas-liquid separation film[[.]]; and a temperature dependent controller for adjusting the shutter.

Claim 3 (cancelled)

Claim 4 (previously presented): The fuel cartridge according to claim 2, further comprising a discharge port that discharges the fuel gas separated by the gas-liquid separation film to the outside of the fuel cartridge.

Claim 5 (currently amended): The fuel cartridge according to claim 4, further comprising a discharged amount controller for controlling an amount of the fuel gas discharged from the discharge port. wherein the fuel cartridge comprises a liquid housing chamber and a gas housing chamber, and the temperature dependent controller adjusts the shutter based on a temperature in the liquid housing chamber.

Claims 6-18 (cancelled)

Claim 19 (currently amended): A fuel cartridge that houses liquid fuel, comprising:

a liquid fuel housing chamber having a fixed volume;

a gas housing chamber;

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a gas-liquid separation film that separates from each other liquid fuel in the liquid fuel housing chamber and fuel gas in the gas housing chamber, which fuel gas comprises vaporized liquid fuel and allows passage of fuel gas from the liquid fuel housing chamber to the gas housing chamber;

a shutter that adjusts a degree of exposure of the gas-liquid separation film[[.]]; and

a temperature dependent controller for adjusting the shutter based on a temperature in the liquid fuel housing chamber.

Claim 20 (previously presented): The fuel cartridge according to claim 19, further comprising a discharge port that discharges the fuel gas separated by the gas-liquid separation film to the outside of the fuel cartridge gas housing chamber.

Claim 21 (previously presented): The fuel cartridge according to claim [[4]] 20, further comprising a discharged amount controller that adjusts an amount of the fuel gas discharged from the discharge port based upon a pressure in the gas housing chamber.

Claim 22 (currently amended): A fuel cartridge that houses liquid fuel, comprising:

a fuel cartridge mounting adapted to detachably mount the fuel cartridge to a fuel cell for introduction of liquid fuel into a fuel receptacle in a fuel cell;

- a liquid fuel housing chamber having a fixed volume;
- a gas housing chamber;

a gas-liquid separation film that separates from each other liquid fuel in the liquid fuel housing chamber and fuel gas in the gas housing chamber, which fuel gas comprises vaporized liquid fuel and allows passage of fuel gas from the liquid fuel housing chamber to the gas housing chamber;

a shutter that adjusts a degree of exposure of the gas-liquid separation film[[.]]; and

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a temperature dependent controller for adjusting the shutter based on a temperature in the liquid fuel housing chamber.

Claim 23 (currently amended): The fuel cartridge according to claim [[23]] <u>22</u>, further comprising:

a discharge port that discharges the fuel gas from the fuel gas housing chamber into the fuel cell fuel receptacle.

Claim 24 (currently amended): The fuel cartridge according to claim [[4]] 23, further comprising a discharged amount controller for controlling an amount of the fuel gas discharged from the discharge port based upon a temperature in the liquid housing chamber.

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